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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,784	03/19/2004	Rodney Scott Armentrout	71418/US02	7760

7590 02/22/2006

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EXAMINER
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MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/804,784	<b>Applicant(s)</b> ARMENTROUT ET AL.	
	<b>Examiner</b> Jeffrey C. Mullis	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 and 23-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 14-22 are rejected under 35 103 as obvious over McNamara et al. (USP 6,444,758).

McNamara et al. disclose a composition produced by end capping a polyethylene glycol/polyester block copolymer in situ with a fatty acid. Note Example 1 in this regard and that all reagents producing the product including the end capping reagent are introduced together. Since the fatty acid is acidic and is chemically combined as an end unit on the end of the block copolymer, the fatty acid reads on applicants' acid end capping reagent. Furthermore since the BMPA reagent which forms the polyester unit is also present in the polymer, this reagent also reads on applicants' end capping reagent. Note that the block copolymer has an acid number at column 22 line 41 and is therefore acidic. Note that the block copolymers may be blended with materials such as polyesters at column 21 lines 17-21. Since applicants' specification discloses that their hard block may be a polyester and since they block out one of the blocks of McNamara's polyester, it would reasonably appear that the polyester block of McNamara is a hard block. Note that the composition has an antistatic effect. See the Abstract in this regard. While arguably the acid end capping reagent of applicants as defined by applicants or at least as applicants intend to define them may necessarily introduce acidic units as an end unit. Note that the paragraph bridging columns 6 and 7

of the patent specifically disclose use of diacids and therefore acidic end unit moieties are contemplated by McNamara although admittedly there are no specific examples of such in the patent and while applicants weight percent of end capping reagent falls within the broad disclosure of the patent there are also no examples of use of such.

The PMPA as utilized by patentees does not result in a block copolymer as contemplated by applicants as no examples exist in which a polymer having an acid functionality of at least 2 is used to end cap. However as set out above, patentees clearly disclose the use of diacids at the paragraph bridging columns 6 and 7 of the patent for use as an acid end capping agent and also discloses the use of other acidic materials such as ascorbic acid as a mixture such as possibly contemplated by applicants' claims. Therefore use of such materials would have been obvious to a practitioner having ordinary skill in the art at the time of the invention in the expectation of adequate results based on the disclosure of McNamara absent any showing of surprising or unexpected results. Choice of applicants weight percent of applicants end capping reagent from those implied by the patent would have been obvious to a practitioner having an ordinary skill in the art at the e time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

This application contains claims 11-13 and 23-42 drawn to an invention nonelected with traverse in Paper No. 6-7-05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant's arguments filed 11-10-05 have been fully considered but they are not persuasive. Example 1 of the patent relied upon uses a hydroxyl acid monomer such as would form a polyester. Patentees specifically disclose that numerous terminal diacid units may be introduced into patentees' polymers at column 7, lines 3-8. That is motivation enough to produce polymers with diacid end capped units. Patentees disclose specific ratios of "lipophilic groups" (encompassing applicants end capping reagent) to monomer precursors of "B" as well as molar ratios of "B" to reactive functional groups "a" of the component "a" as well as molecular weights of "A" at column 5, lines 40-55 at column 10, lines 8-13. Applicants weight percent of applicants end capping unit is broadly encompassed by such disclosure of patentees. Reaction of the preferred "A" component of polyethylene oxide of molecular weight of 5000 with preferred "B" component of BMPA of (again preferred) 1:1 ratio of "B" units to "A" reactive groups as set out at column 10, lines 7-13) with maleic anhydride results in applicants ratio for almost the entire (preferred) range of "lipophilic groups" to "B" of 1:5 to 2:1 disclosed at column 10, lines 7-13.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis at telephone number 571 272 1075.

Jeffrey C. Mullis  
J Mullis  
Art Unit 1711

JCM

2-15-06

**Jeffrey Mullis**  
**Primary Examiner**  
**Art Unit 1711**

A handwritten signature in black ink, appearing to be 'JCM', written over the printed name and title.